

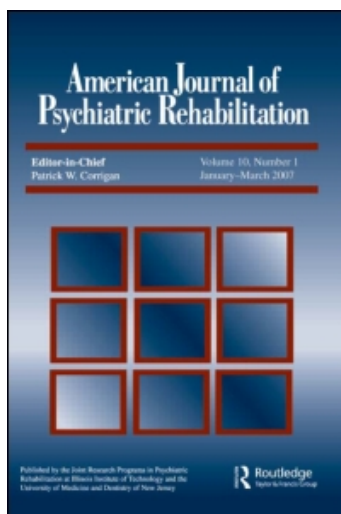
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A Wellness Approach to Addressing Tobacco in Mental Health Settings: Learning About Healthy Living

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A Wellness Approach to Addressing Tobacco in Mental Health Settings: Learning About Healthy Living

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Objective: Treatments are needed for smokers with serious mental illness (SMI) who are not ready to quit.

Methods: This article describes a 20-session group wellness treatment (Learning About Healthy Living [LAHL]) designed to provide information on tobacco use and other issues to enhance healthy living—nutrition, physical activity, and stress management. Goals are to increase awareness about tobacco and the benefits of treatment to enhance motivation for improving health.

Results: LAHL was successfully pilot-tested for feasibility in nine community treatment programs; feedback from staff and consumers was positive.

Conclusions: LAHL is a feasible treatment model for addressing tobacco that is consistent with wellness and recovery in mental health settings and should be studied further.

Keywords: Group treatment; Healthy living; Serious mental illness; Tobacco

Heavy Tobacco Use and Numerous Consequences in Individuals With Mental Illness

Research has shown that individuals with mental illness or addictions are two to three times more likely to be smokers, and they consume a disproportionately high amount of tobacco product (Hughes et al., 1986; Lasser et al., 2000). Individuals with mental illness have increased lifetime smoking, more heavy smoking, and higher nicotine dependence compared with the general population (Venable et al., 2003; Breslau et al., 2004). Increased smoking is associated with

depression (Glassman, 1998), bipolar disorder (Vanable et al., 2003; Gonzalez-Pinto et al., 1998), anxiety disorders (Breslau et al., 2003), schizophrenia (de Leon & Diaz, 2005) and other disorders.

Smokers with mental illness incur a significant number of tobacco-caused medical illnesses (Stroup et al., 2000; Lichtermann et al., 2001). Research suggests even greater loss of life (estimated at 25 years) than previously known (NASMHPD, 2006). Much of the excess medical morbidity is attributable to diseases with modifiable risk factors including tobacco dependence. Excess risk of heart disease in schizophrenia can be attributable mainly to smoking after controlling for weight and body mass index (Goff et al., 2005). Smokers, even in the general population, have poorer health and quality of life than those who have never smoked. Individuals with mental illness may be particularly at risk, since having more than one health risk behavior (i.e., poor diet or low physical activity) is associated with greater nicotine dependence (Sherwood et al., 2000).

Tobacco use results in other consequences, in addition to health, that can adversely affect quality of life in individuals with mental illness. Smokers with schizophrenia spend almost one third of monthly disability income on cigarettes (Steinberg et al., 2004b). Smoking influences community integration, because smokers have less to spend on clothing and housing. As smoking decreases in the general population, there is added the stigma of being a smoker that can reduce success in obtaining employment, housing, or successful relationships. Smoking increases the metabolism of several psychiatric medications, resulting in increased dosage requirements (Desai et al., 2001).

Despite the magnitude of tobacco use, quit rates for the seriously mentally ill (SMI) are lower than in the general population (Lasser et al., 2000; Covey et al., 1994; Beckham et al., 2003). Contributing factors include lower motivation to quit tobacco, fewer quit attempts, and increased severity of nicotine dependence. Another important consideration is that access to treatment for this group is reduced because few mental health professionals are identifying and treating tobacco disorders. Indeed, the concept of helping individuals with SMI to stop smoking is new, although luckily beginning to change.

Most tobacco dependence interventions, which are provided in primary care settings, are brief and may lack the intensity or specialization needed for this population. Typical community smoking cessation groups attend 6–8 sessions. Participants are encouraged to quit at Week 2 and receive brief education and counseling in

subsequent sessions. These services rely on a highly motivated client who is ready to quit, and smokers with SMI may have difficulty achieving success in these groups. In addition, most "how to quit" materials available to the public may be difficult for some consumers with SMI to understand.

Some individuals with SMI need options that first engage them in tobacco treatment. It is estimated that only 10–25% of individuals with SMI are interested in quitting smoking within the next month (Ziedonis & Trudeau, 1997; Carosella, Ossip-Klein, & Owens, 1999; Hall et al., 1995). Interventions tailored for smokers with mental illness (Addington & el-Guebaly, 1998; Ziedonis & George, 1997; Hall et al., 1996; McFall et al., 2005), target those preparing to quit. Fewer work to motivate smokers who are not ready for a "quit program." This is unfortunate inasmuch as the U.S. Public Health Service Guidelines, "Treating Tobacco Use and Dependence" (Fiore et al., 2000), state that all smokers should be offered treatment and that those unwilling to quit be provided with a motivational intervention. These guidelines also comment on the need for tailored interventions for smokers with mental illness.

Tobacco Dependence Treatment Needed in Mental Health Settings

Additional reasons why individuals with SMI do not receive adequate tobacco dependence treatment may include a disorganized lifestyle, lack of access to health care, difficulty communicating needs, and following through with recommendations. These make the mental health treatment site a logical choice for the delivery of integrated smoking cessation and wellness initiatives with multiple opportunities to intervene. As tobacco dependence is a chronic, relapsing condition that requires numerous attempts to achieve abstinence, a model of integrated care is desirable, offering treatments where consumers are. Integrated tobacco treatments would be expected to be successful, as with other co-occurring disorders (SAMHSA, 2002). Despite these potential advantages, mental health professionals infrequently assess or treat their patients' tobacco use (Peterson et al., 2003; Montoya et al., 2005).

Interventions that target individuals with SMI must address the complex biopsychosocial features of tobacco use and mental illness. Social factors are important as well since smoking remains part of the culture of treatment facilities. Wellness initiatives that

incorporate practicing healthy behaviors have the potential to yield multiple benefits. Individuals with SMI can change not only tobacco use, but also other health-risk behaviors (Vreeland et al., 2003; Menza et al., 2004; Pelletier et al., 2005).

METHODS

Manual Development: Learning About Healthy Living: Tobacco and You Group Treatment Approach

We developed and pilot tested a manualized group treatment called *Learning About Healthy Living* (LAHL) that addresses tobacco dependence and related health behaviors, including unhealthy eating and physical inactivity. The program was developed with the support and vision of the New Jersey Division of Mental Health Services. Coauthors and contributors included members of the UMDNJ-Robert Wood Johnson Medical School Division of Addiction Psychiatry, the UMDNJ-UBHC Center for Excellence in Psychiatry, and the UMDNJ-Tobacco Dependence Program. The LAHL manual was revised with input from mental health consumers and treatment staff, making it informative yet practical and easy to use.

The aim of LAHL was to provide a treatment for smokers with SMI who may not be contemplating quitting smoking. LAHL can be implemented by a broad range of mental health professionals and paraprofessionals, and it is grounded in a public health/educational model, combined with motivational techniques. The treatment was designed to (a) give consumers information about tobacco use and mental illness, (b) give consumers information about the recovery process from tobacco dependence including treatment options, (c) help consumers gain motivation to lead a tobacco-free lifestyle and quit smoking, (d) help consumers develop skills to assist them in quitting tobacco use and living a healthier lifestyle, and (e) use the group format to structure the treatment and provide support and modeling experiences for the consumer struggling with tobacco dependence and mental illness.

LAHL is designed for all types of smokers, and it has the overall goal of moving consumers toward a tobacco-free lifestyle through a 20-session group curriculum. Each weekly group session lasts 50 minutes. The LAHL manual is organized with each topic as a chapter that can be discussed during a single group session. Each chapter has a topic about smoking or healthy living and topics

for discussion or practice. The matching facilitator's section contains goals and objectives for the session, as well as suggested approaches. The chapters were designed to be used sequentially, as in a weekly group treatment, although each can stand alone as a unique topic related to tobacco use and healthy living that can be integrated into other treatment approaches. In contrast to traditional smoking cessation groups, LAHL does not emphasize setting a quit date. Immediate quitting is not required or stressed.

Selection of Clients for LAHL Group

Ideally, all smokers with SMI are candidates for this group treatment if they are stable, not in a crisis, and not actively abusing other substances. Some consumers may not attend every session, and others may join at a later date, so in that way, LAHL is an open format. Unlike other smoking cessation groups, which rely on participants all being ready to quit, LAHL accepts smokers of all motivational levels. Groups can be mixed, with members who are ambivalent about quitting and some who have no desire to quit. This is done for two reasons. First, the treatment itself motivates with the goal of increasing the desire to quit smoking through successive sessions. Additionally, we have found that smokers with SMI may not verbally express a desire to quit, yet they demonstrate some interest by participating in the group sessions. Some may even take further steps to actively reduce their smoking or use a nicotine replacement medication.

Giving Feedback to Smokers

Giving personalized feedback is one approach that has been shown to work in engaging smokers with SMI into tobacco treatment (Steinberg et al., 2004a). LAHL gives personalized feedback to participants in several ways, including the amount of money spent to purchase tobacco. Money spent on tobacco is calculated for smokers and discussed in a session about quality of life and how money might be better spent.

LAHL also utilizes feedback to smokers about their exposure to carbon monoxide (CO) which results from smoking. This is done at each group session by measuring the exhaled CO with a portable hand-held meter. Smokers learn that CO enters their bloodstream from smoke and strains the heart by reducing the oxygen content

of blood. Smokers then understand how smoking increases their immediate risk of cardiovascular disease. Since CO levels return to normal in 2–3 days after quitting, there is also the positive message that the effect is reversible. CO monitoring is motivating as smokers want to see their levels go down, and it is also used to verify abstinence.

Overall Wellness Approach

Although the emphasis is on tobacco, the LAHL manual includes other aspects of healthy living including improving diet, increasing activity, and managing stress. This is important because smokers are more likely to engage in other health risk behaviors. The close relationships between smoking and other behaviors allows for them to be addressed simultaneously in treatment initiatives like LAHL, which has a “complete wellness” approach.

Facilitator’s Guide and the Style of Group Treatment

The group leader takes an active role as clinician-educator, which implies a dual role. The term, *facilitator*, is used in the LAHL manual to distinguish this unique role—to facilitate discussion and provide a strong educational component for each session. This approach provides SMI consumers with more structure and focus on a selected topic. Activities and exercises in conjunction with each chapter encourage learning, participation, and skill building. The facilitator strives for a balance between providing information, encouraging group participation, and allowing time for questions and discussion.

LAHL is designed to move through each chapter sequentially. Consumer handouts provide easy-to-understand concepts on each topic with an interactive section for written responses or questions for discussion. The corresponding section in the facilitator’s guide includes goals, objectives, and suggested approaches. Because this treatment has real-world applicability, a brief preparation time (5 minutes) is allotted for the facilitator to review materials before each group session begins. Basic record keeping is carried out for each group on the Learning About Healthy Living /Group Record sheet, which assists in tracking the progress of participants. This documents attendance, number of cigarettes smoked during the past week, the CO reading, and whether the client has used tobacco treatment medications.

Structure and Sequence of LAHL Group Sessions

Each group session of LAHL follows a similar structure, which begins with an educational component. This information is presented as simple text, with examples relevant to daily life. The rest of the session is devoted to an exercise to engage smokers in the material and help them express their thoughts and feelings. For example, after learning about the more than 4,000 compounds in tobacco smoke, with examples of familiar toxins (i.e., acetone = nail polish remover) consumers are asked how this information might influence their attitudes about smoking. Empowerment to make personal choices is stressed. There is an opportunity to practice skills such as requesting tobacco treatment medications, calling to make a treatment appointment, and changing smoking patterns and behaviors.

The content of LAHL progresses over the 20 weeks and is divided into two phases; the first 10 sessions are health oriented with general information on tobacco and mental illness. This is non-confrontational and meant to lower treatment resistance by keeping the focus off the individual's quitting. The remaining 10 sessions become more personalized to increase self-reflection and encourage behavior change. Chapter 15 (Why Should I Quit Smoking?) includes a decisional balance activity and exercises to examine patterns of smoking. "Seeking additional treatments," including pharmacotherapy, is covered in the last three sessions.

The goal of completing 20 weeks of LAHL is to teach smokers about the impact of tobacco on their lives and to prepare them for tobacco cessation treatment; this is more action oriented, and it includes the making of a quit plan or setting a quit date. Ideally, some form of individual or group cessation follow-up treatment would then be available for LAHL "graduates."

Learning About Pharmacotherapy

Three chapters of the LAHL manual are dedicated to educating smokers trying to quit about the options for pharmacotherapy, an important goal of LAHL. Practice guidelines indicate that all smokers trying to quit should use pharmacotherapy as a first-line treatment, except when there are contraindications (Fiore, 2000).

Nicotine treatment might be even more important for this group: Not only do these smokers have high levels of dependence,

but nicotine may have particular advantages for smokers with mental illness. There has been speculation that individuals with mental illness smoke at increased rates because they are self-medicating themselves with nicotine. Certain neuropsychiatric disorders, including Alzheimer's disease ADHD, and schizophrenia, are associated with abnormalities in the nicotinic cholinergic systems. Thus, individuals with disorders of attention and cognition may benefit from smoking or taking nicotinic agonists; however the short-vs.-long-term benefits for attention and cognition are not known. Nicotine reduces the symptoms of ADD (Conners et al., 1996; Levin et al., 2001) and improves aspects of cognition in schizophrenia in short-term studies (Sacco et al., 2005; Smith et al., 2002).

Although the self-medication hypothesis is an attractive one, and it may account for some of the increased prevalence rates, there are many psychosocial risk factors and treatment systems factors that have also resulted in both the high rates of nicotine dependence and the difficulty for this population to quit. Long-term studies are needed on the effect of quitting smoking in this population on neuropsychological and other symptoms. Relying on tobacco as a nicotine source is inappropriate, given the obvious hazards of tobacco smoke, which contains numerous toxins and carcinogens. Altering doses of nicotine medications by giving higher doses or dosing for longer periods are strategies that warrant further study.

Despite the efficacy and usefulness of tobacco medication treatments, they are used to a limited degree in smokers with SMI (Williams & Hughes, 2003). Pharmacotherapy may be even more important to smokers with SMI as they have high levels of nicotine dependence. They also have improved quit-smoking outcomes when they receive pharmacotherapies, including bupropion (Evins et al., 2005; George, 2002a), nicotine patch (Addington & el-Guebaly, 1998; Ziedonis & George, 1997) or nicotine nasal spray (Williams et al., 2004).

It is important to educate smokers with SMI about available treatment options. Self-efficacy in this group is low; understanding pharmacotherapy treatment options can increase hope for a successful future cessation attempt. The LAHL manual gives smokers with SMI the important information that medications are a proven, effective component of treatment that doubles their chances of quitting.

Training of LAHL Facilitator

LAHL was developed and structured so that any mental health clinician could deliver it with limited training. In this pilot implementation, facilitators received an initial 1-day training and ongoing supervision. Goals were to provide clinicians with background information and materials to assist with the implementation of the LAHL group treatment at their various outpatient sites. Thirty-eight clinicians from nine mental health sites attended. Most had no prior training or experience in treating tobacco use.

The training curriculum consisted of 2 hours of didactic material on smoking and mental illness including a biopsychosocial understanding of this comorbidity. The remainder of the training (4 hours) was spent on implementation issues including how to use the facilitator's guide, consumer handouts, and appendixes of additional resource materials. We reviewed how to assess tobacco use and develop a tobacco treatment plan. Detailed instructions and a hands-on practice session for using a CO monitor were included. In addition, pilot sites received support and supervision for the first 3 months. This consisted of one or two brief site visits and two or three monthly telephone calls with the project staff to discuss implementation issues.

Program Evaluation Study

A limited program evaluation study was designed to assess the feasibility and acceptability of implementing the LAHL program in nine community mental health day-treatment sites in New Jersey. Day-treatment programs were chosen since they had a format for weekly attendance and group treatment that could enhance participation in the LAHL groups. The main data source was a weekly feedback form that LAHL group facilitators were required to complete immediately after group sessions. This one-page check sheet asked facilitators to report number of attendees at group and rate aspects of the weekly topic in the manual. Facilitators rated the level of consumer participation and interest, as well as their own ability to run LAHL groups. This feedback was sent by fax weekly to the project team. We also held a series of focus groups with both staff and consumers at several of the sites. The study was approved by the Institutional Review Board of UMDNJ-RWJMS.

RESULTS

Weekly Feedback Form

Weekly feedback was received from more than 92 different LAHL group sessions that occurred at the nine pilot sites. The average number of consumers that attended LAHL groups was nine (range, 4–18). We asked facilitators to report how many consumers stayed for the entire group since there was initial skepticism about consumers’ interest in and potential resistance to attending a tobacco group. Since the average number staying for the entire group was also nine, we can conclude that most consumers stayed for the duration of each LAHL group. Facilitators’ ratings of other aspects of the LAHL group are detailed in Tables 1 and 2. These indicate predominantly excellent or very good ratings for consumer interest and participation. Similarly, facilitators rated their own ability to lead the group as excellent or very good in most instances. The overall LAHL manual content was rated excellent or very good by 73%. Most (74%) rated the difficulty level as appropriate for consumers. No one rated the handouts as too difficult. Although we encouraged the facilitators to suggest changes to the materials and consumer handouts, more than half suggested no changes be made to the materials.

TABLE 1. Facilitators’ Rating as Group Feasibility (N = 93 groups at 9 sites; Number [Percentage])

	Excellent	Very good	Satisfactory	Below average	Missing
<i>Facilitators’ rating of consumers who participated in group</i>					
Interest in group	42 (45)	41 (44)	7 (8)	1 (1)	2 (2)
Ability to understand group	43 (46)	38 (41)	10 (11)	0 (0)	2 (2)
Level of participation in group	53 (57)	25 (27)	9 (10)	1 (1)	5 (5)
Ability to do written exercise	31 (33)	33 (36)	19 (20)	0 (0)	10 (11)
<i>Facilitators’ rating of themselves as facilitators</i>					
Their ability to facilitate group	39 (42)	39 (42)	12 (13)	0 (0)	3 (3)
Their ability to teach educational content of group	36 (39)	40 (43)	14 (15)	0 (0)	3 (3)
Their ability to answer questions in group	33 (36)	44 (47)	13 (14)	1 (1)	2 (2)

TABLE 2. Facilitators' Rating of Manual Contents (N = 93 groups at 9 sites; Number [Percentage])

	Excellent	Very good	Satisfactory	Below average	Missing
<i>Facilitators' rating of manual contents</i>					
Overall group content	28 (30)	40 (43)	17 (18)	2 (2)	6 (7)
	Fine	Too difficult	Too easy	–	Missing
Difficulty of consumer handout	69 (74)	0 (0)	10 (11)	–	14 (15)
	Make shorter	Make longer	No change	Remove this group	Missing
Suggested changes to group	4 (4)	22 (24)	52 (56)	0 (0)	15 (16)

Qualitative Feedback

We also held a series of focus groups at the pilot sites to get qualitative feedback from consumers and staff who had participated in LAHL groups. Twenty-six consumers participated. Themes emerged in their responses. When asked about their first impression of LAHL, they acknowledged some initial feelings of resistance and fear, which dissipated once they attended the first few sessions. Many endorsed hope that the treatment would help them. They found the handouts helpful and easy to read and admitted learning important and useful information about health and treatment medications. Four consumers reported that they had quit smoking since starting LAHL and several more had reduced the number of cigarettes smoked per day. Many stated that they wanted to try to quit smoking in the next 6 months, and a few had also tried to improve their eating or exercise habits. LAHL topics they endorsed as particularly helpful were those on the chemicals found in cigarette smoke, effects of CO, and nicotine replacement medications. One consumer remarked that there were benefits from attending a LAHL group even if not interested in immediately quitting smoking. All responded affirmatively that other mental health programs should use the LAHL group treatment. Consumers questioned why smoking had not been addressed sooner.

Staff focus groups were held separately from consumer focus groups to facilitate independent responses. Staff felt the manual was well organized and materials easy to locate and understand. Most reported that LAHL groups were "easier to implement than

I thought" and used the facilitator's guide to prepare for weekly sessions. None of these staff had received prior tobacco training, although they were trained in other co-occurring disorders. Some wanted even more tobacco training and sought out additional information via the Internet and other resources.

Their impression was that consumers responded well to LAHL groups and to CO feedback. They reported that consumers began to initiate discussions with physicians and staff about wanting to quit smoking. Suggestions for manual improvements by both consumers and staff were incorporated into its final revisions.

DISCUSSION

LAHL is an innovative group treatment for smokers with SMI that can be delivered in the mental health setting. Since many individuals with SMI are not ready to quit smoking, LAHL can help motivate smokers toward a healthy life that eventually includes quitting smoking. Results of our pilot implementation revealed that the LAHL pilot was a success. Feedback from staff and consumers who participated felt this was a feasible and acceptable model for addressing tobacco.

Strengths of this approach included the diverse makeup of the program team with expertise in tobacco treatment development and implementation of mental health wellness programs. The support of the state Division of Mental Health Services was also an asset both in vision and financial investment. Each program in the pilot study was supplied with a CO meter to use in conjunction with the LAHL approach. This tool, which typically costs less than \$1,000, was deemed invaluable by group facilitators.

LAHL has been well received nationally as a model for addressing tobacco in mental health settings. The National Association of State Mental Health Program Directors has included the manual in its Tobacco-Free Living in Psychiatric Settings Best Practices Tool Kit entitled "Tobacco-Free Living in Psychiatric Settings" for distribution to state-operated mental health facilities nationwide. In May 2007 the LAHL manual was made publicly available for use. It can now be viewed and downloaded from the following Internet site: <http://rwjms2.umanj.edu/pdapweb/LAHL.htm>

As this was a pilot study, a major limitation was that we did not assess the efficacy of this treatment with regard to consumer

outcomes. Further studies are needed to assess knowledge acquisition, changes in motivation levels, as well as changes in tobacco use or other lifestyle behaviors. Staff anecdotally reported that consumers in LAHL groups did reduce smoking in both measures of cigarettes per day as well as biological measures (reduced CO levels). Each group also had at least one smoker make a quit attempt; with many other consumers reporting increased awareness of their smoking. This is remarkable given that setting a quit date was not part of the curriculum. All these behavior changes are evidence of the increased motivation to quit smoking that occurred in LAHL groups, warranting further study.

An additional limitation of this feasibility study was the applicability of findings to settings other than day-treatment programs. Persons receiving this type of service may be in a different stage of their recovery and may not be representative of all persons with SMI who smoke. Also, the day treatment environment is an artificial environment designed to provide short-term treatment. Whether a person can take information learned in such a setting and transfer these new skills without additional individualized supports into their environments of living, learning, and working is debatable. In New Jersey, like other states, there have been successful efforts to make day treatment a more intensive prevocational experience with a strong recovery focus. In addition to LAHL, most offer sessions in illness management and recovery and individualized wellness initiatives to help consumers make healthier lifestyle choices.

LAHL was also developed as part of a continuum of services for addressing tobacco use in mental health settings that also included community outreach to smokers via peer counselors (the CHOICES program [www.njchoices.org]) and training of mental health professionals. Consumers Helping Others Improve Their Condition by Ending Smoking (CHOICES) is a recovery-oriented strategy for addressing tobacco use that employs mental health consumers to teach smokers in community settings about the importance of addressing their tobacco use (Williams, 2007). CHOICES peer counselors offer information to smokers such as the availability of tobacco cessation treatment resources and LAHL groups.

Future investigators using LAHL should consider integrating this approach with other types of interventions focused on recovery goals. When interventions connect health behavior change with a person's recovery goal, it becomes more meaningful for that

individual and might increase the person's internal motivation to quit smoking. Smoking impacts many domains of life including physical health, successful employment, financial health, housing choices, and social networks.

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